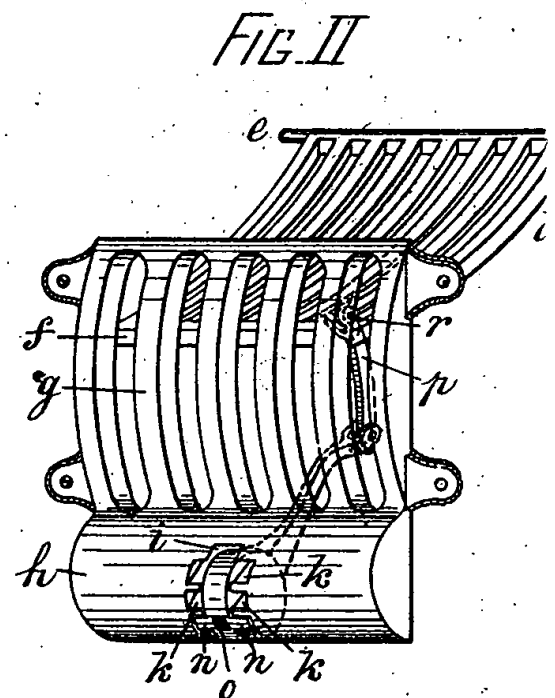
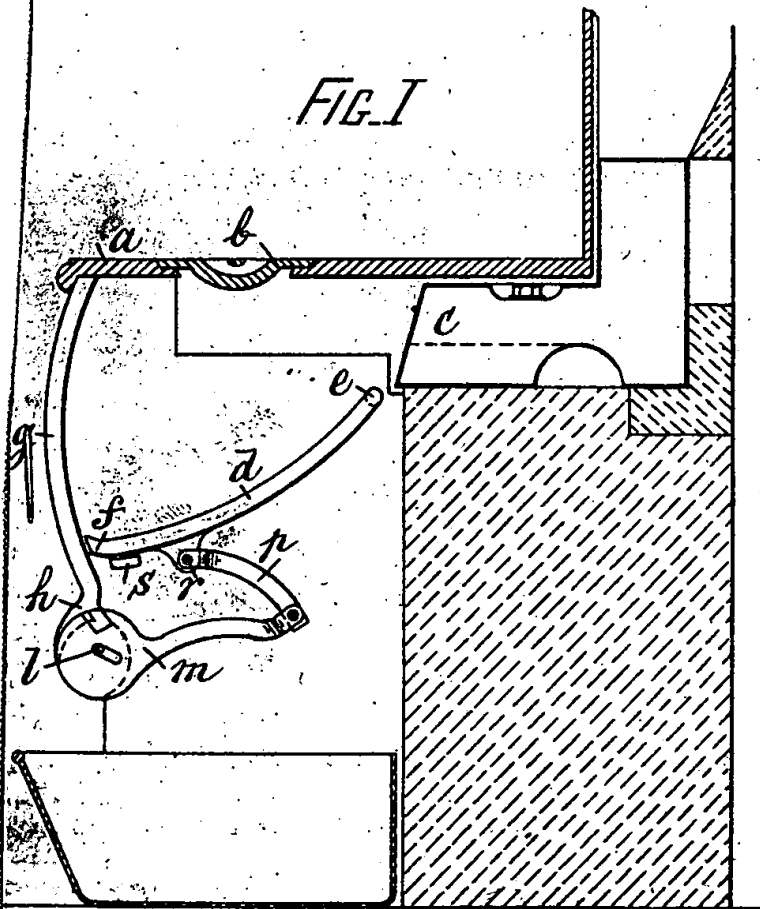


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[This Drawing is a reproduction of the Original on a reduced scale.]

Good 11,447 June 18, 1892

(126/541)

N° 11,447



A.D. 1892

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Date of Application, 18th June, 1892

Complete Specification Left, 18th Mar., 1893—Accepted, 6th May, 1893

PROVISIONAL SPECIFICATION.

Improvements in Firegrates.

I, HENRY HARPER WOOD, of Burn Cross, Chapeltown, near Sheffield, Stove Grate Foreman, do hereby declare the nature of this invention to be as follows:—

This invention relates to the form of grates for heating, cooking, or other stoves or fireplaces, in which the position of the bottom grate is made adjustable as desired, the grate being raised or lowered so as to vary the fuel capacity of the stove, as may be desired at different times.

Supposing that my invention is to be applied to the firegrate of a cooking range or stove, the fireplace of which is closed above by a hot plate having one or more openings provided with covers, whilst the front edge of the lower part of the boiler forms the upper part of the back of the fireplace, I form the bottom grate of a frame consisting of a sufficient number of parallel bars at a sufficient distance apart preferably extending from the front to the back and somewhat curved downward at their centre. The back edge of this bottom grate is adjusted at about the level of the bottom of the boiler, and turns upon pivots at its two ends fitting into corresponding recesses or sockets in the two sides of the fireplace. Or, the back edge of the bottom grate may be pivotted in any other convenient way, so that its front edge can be raised or lowered to any desired height. This front edge of the pivotted bottom grate fits close up to the bars which form the front of the fireplace and are preferably vertical and curved so that as the bottom grate is raised and lowered its front edge is constantly in close proximity to them.

The vertical bars which form the front of the fireplace as described are connected at their lower ends by a transverse plate or bar, preferably semicircular or nearly so in transverse section, and in the front of this plate or bar is formed a vertical slit or opening having notches of suitable shape at its edges and having vertical sides through which a pivot passes upon which turns the outer end of a lever fitting in the slot and provided in front with lateral projections which fit into the notches in the sides of the opening. The hole in the lever, through which the pivot passes is elongated, so that the lever can be drawn forward until the lateral projections upon it are clear of the notches and it then can be turned round more or less and then moved back with the projections in any of the notches which may be desired.

An opening is made in the front end of the lever into which the end of a suitable tool can be inserted for manipulating the lever as described.

The other end of the lever extends under the firegrate and is jointed to a link the other end of which is jointed to the lower side of the bottom pivotted firegrate so that when the lever is raised as above described the bottom grate is also raised upon its pivots, its front edge passing up inside the front vertical bars, and it is retained at any desired height by the lateral projections which fit into the corresponding notches as already described.

The front of the fireplace is bolted or screwed to the sides, and stops or supports are provided upon which the moveable bottom grate rests in its lowest position.

The whole of the parts are made of cast iron or other suitable material, and the size and capacity of the fireplace can be very quickly and easily altered and adjusted as may be desired, whilst the apparatus is simple cheap, and easily put together and operated and it is not likely to get out of order.

[Price 8d.]

It may be applied to fireplaces of any kind, and the details of construction may be varied more or less to suit different circumstances.

Dated this 18th day of June 1892.

EDWARDS & Co.,
35, Southampton Buildings, London, Agents for the Applicant. 5

COMPLETE SPECIFICATION.

Improvements in Firegrates.

I, HENRY HARPER WOOD, of Burn Cross, Chapeltown, near Sheffield, in the County of York, Stove Grate Foreman, do hereby declare the nature of this invention, and in what manner the same is to be performed to be particularly described and ascertained in and by the following statement and accompanying drawing, that is to say :—

This invention relates to the form of grates for heating, cooking, or other stoves or fireplaces, in which the position of the bottom of the grate is made adjustable as desired, the grate being raised or lowered so as to vary the fuel capacity of the 15 stove, as may be desired at different times.

The accompanying drawing is in illustration of my invention,

Figure 1 being a vertical section through a cooking range, and Figure 2 a perspective view of the improved fire-grate.

The figures shew my invention applied to the fire-grate of a cooking range or 20 stove, the fireplace of which is closed above by a hot plate *a* having one or more openings *b* provided with covers, whilst the front edge of the lower part of the boiler *c* forms the upper part of the back of the fireplace.

I form the bottom grate *d* of a frame consisting of a sufficient number of parallel bars at a sufficient distance apart, preferably extending from the front to the back 25 and somewhat curved downward at their centre as shewn. The back edge of this bottom grate *d* is adjusted at about the level of the bottom of the boiler *c*, and turns upon pivots *e, e*, at its two ends, fitting into corresponding recesses or sockets in the two sides of the fireplace. Or, the back edge of the bottom grate may be pivotted in any other convenient way, so that its front edge *f* can be 30 raised or lowered to any desired height. This front edge *f* of the pivotted bottom grate fits close up to the bars *g* which form the front of the fireplace, and are preferably vertical as shewn, and curved so that as the bottom grate *d* is raised and lowered its front edge is constantly in close proximity to them.

The vertical bars which form the front of the fireplace as described, are 35 connected at their lower ends by a transverse plate or bar *h*, preferably semi-circular or nearly so in transverse section, and in the front of this plate or bar is formed a vertical slit or opening *i* having notches *k* of suitable shape at its edges, and having vertical sides through which a pivot *l* passes upon which turns the outer end of a lever *m* fitting in the slot *i* and provided in front with lateral 40 projections *n* which fit into the notches *k* in the sides of the opening. The hole in the lever *m* through which the pivot *l* passes is elongated as shewn, so that the lever can be drawn forward until the lateral projections *n n* upon it are clear of the notches *k*, and it can then be turned round more or less and then moved back with the projections *n* fitting in any of the notches *k* which may be desired. 45

An opening *o* is made in the front end of the lever *m* into which the end of a suitable tool can be inserted for manipulating the lever as described.

The other end of the lever *m* extends under the firegrate and is jointed to a link *p* the other end of which is jointed at *r* to the lower side of the bottom pivotted firegrate *d* so that when the lever *m* is raised upon its pivots *e, e*, its 50 front edge *f* passes up inside the front vertical bars *g*, and it is retained at any desired height by the lateral projections *n* which fit into the corresponding notches *k* as already described.

Wood's Improvements in Firegrates.

The front of the fireplace is bolted or screwed to the sides, and stops or supports are provided as at *s*, upon which the moveable bottom grate *d* rests in its lowest position.

The whole of the parts are made of cast iron or other suitable material, and the size and capacity of the fireplace can be very quickly and easily altered and adjusted as may be desired, whilst the apparatus is simple, cheap, and easily put together and operated, and it is not likely to get out of order.

It may be applied to fireplaces of any kind as well as to the cooking range illustrated in the drawing, and the details of construction may be varied more or less to suit different circumstances.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is

1. The combination of the pivotted bottom grate *d*, front *g*, slotted lever *m*, projections *n*, notches *k*, and pivotted link *p*, arranged and operating substantially in the manner and for the purpose described and illustrated.

Dated this 18th day of March 1893.

EDWARDS & Co.,
Agents for the Applicant.